ENTERED   OIPE

RAW SEQUENCE LISTING   DATE: 07/02/2002
PATENT APPLICATION: US/10/007,706   TIME: 13:57:13

Input Set : **A:\A70040-1.ST25.txt**
Output Set: **N:\CRF3\07022002\J007706.raw**

```
 3 <110> APPLICANT: Penner, Reinhold
 4        Fleig, Andrea
 6 <120> TITLE OF INVENTION: METHODS OF SCREENING FOR LTRPC2 MODULATORS
 8 <130> FILE REFERENCE: A-70040-1/RFT/NBC
10 <140> CURRENT APPLICATION NUMBER: US 10/007,706
11 <141> CURRENT FILING DATE: 2001-11-13
13 <150> PRIOR APPLICATION NUMBER: US 60/248,442
14 <151> PRIOR FILING DATE: 2000-11-13
16 <150> PRIOR APPLICATION NUMBER: US 60/254,528
17 <151> PRIOR FILING DATE: 2000-12-08
19 <160> NUMBER OF SEQ ID NOS: 10
21 <170> SOFTWARE: PatentIn version 3.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1503
25 <212> TYPE: PRT
26 <213> ORGANISM: Homo sapiens
28 <400> SEQUENCE: 1
30 Met Glu Pro Ser Ala Leu Arg Lys Ala Gly Ser Glu Gln Glu Glu Gly
31 1               5                   10                  15
34 Phe Glu Gly Leu Pro Arg Arg Val Thr Asp Leu Gly Met Val Ser Asn
35              20                  25                  30
38 Leu Arg Arg Ser Asn Ser Ser Leu Phe Lys Ser Trp Arg Leu Gln Cys
39          35                  40                  45
42 Pro Phe Gly Asn Asn Asp Lys Gln Glu Ser Leu Ser Ser Trp Ile Pro
43      50                  55                  60
46 Glu Asn Ile Lys Lys Lys Glu Cys Val Tyr Phe Val Glu Ser Ser Lys
47 65                  70                  75                  80
50 Leu Ser Asp Ala Gly Lys Val Val Cys Gln Cys Gly Tyr Thr His Glu
51              85                  90                  95
54 Gln His Leu Glu Glu Ala Thr Lys Pro His Thr Phe Gln Gly Thr Gln
55              100                 105                 110
58 Trp Asp Pro Lys Lys His Val Gln Glu Met Pro Thr Asp Ala Phe Gly
59          115                 120                 125
62 Asp Ile Val Phe Thr Gly Leu Ser Gln Lys Val Lys Lys Tyr Val Arg
63      130                 135                 140
66 Val Ser Gln Asp Thr Pro Ser Ser Val Ile Tyr His Leu Met Thr Gln
67 145                 150                 155                 160
70 His Trp Gly Leu Asp Val Pro Asn Leu Leu Ile Ser Val Thr Gly Gly
71              165                 170                 175
74 Ala Lys Asn Phe Asn Met Lys Pro Arg Leu Lys Ser Ile Phe Arg Arg
75              180                 185                 190
78 Gly Leu Val Lys Val Ala Gln Thr Thr Gly Ala Trp Ile Ile Thr Gly
79          195                 200                 205
```

RAW SEQUENCE LISTING   DATE: 07/02/2002
PATENT APPLICATION: US/10/007,706   TIME: 13:57:13

Input Set : A:\A70040-1.ST25.txt
Output Set: N:\CRF3\07022002\J007706.raw

```
82  Gly Ser His Thr Gly Val Met Lys Gln Val Gly Glu Ala Val Arg Asp
83      210             215             220
86  Phe Ser Leu Ser Ser Ser Tyr Lys Glu Gly Glu Leu Ile Thr Ile Gly
87  225             230             235                 240
90  Val Ala Thr Trp Gly Thr Val His Arg Arg Glu Gly Leu Ile His Pro
91              245             250                 255
94  Thr Gly Ser Phe Pro Ala Glu Tyr Ile Leu Asp Glu Asp Gly Gln Gly
95              260             265                 270
98  Asn Leu Thr Cys Leu Asp Ser Asn His Ser His Phe Ile Leu Val Asp
99          275             280             285
102 Asp Gly Thr His Gly Gln Tyr Gly Val Glu Ile Pro Leu Arg Thr Arg
103     290             295             300
106 Leu Glu Lys Phe Ile Ser Glu Gln Thr Lys Glu Arg Gly Gly Val Ala
107 305             310             315                 320
110 Ile Lys Ile Pro Ile Val Cys Val Val Leu Glu Gly Gly Pro Gly Thr
111             325             330                 335
114 Leu His Thr Ile Asp Asn Ala Thr Thr Asn Gly Thr Pro Cys Val Val
115             340             345                 350
118 Val Glu Gly Ser Gly Arg Val Ala Asp Val Ile Ala Gln Val Ala Asn
119         355             360             365
122 Leu Pro Val Ser Asp Ile Thr Ile Ser Leu Ile Gln Gln Lys Leu Ser
123     370             375             380
126 Val Phe Phe Gln Glu Met Phe Glu Thr Phe Thr Glu Ser Arg Ile Val
127 385             390             395                 400
130 Glu Trp Thr Lys Lys Ile Gln Asp Ile Val Arg Arg Arg Gln Leu Leu
131             405             410                 415
134 Thr Val Phe Arg Glu Gly Lys Asp Gly Gln Gln Asp Val Asp Val Ala
135             420             425                 430
138 Ile Leu Gln Ala Leu Leu Lys Ala Ser Arg Ser Gln Asp His Phe Gly
139         435             440             445
142 His Glu Asn Trp Asp His Gln Leu Lys Leu Ala Val Ala Trp Asn Arg
143     450             455             460
146 Val Asp Ile Ala Arg Ser Glu Ile Phe Met Asp Glu Trp Gln Trp Lys
147 465             470             475                 480
150 Pro Ser Asp Leu His Pro Thr Met Thr Ala Ala Leu Ile Ser Asn Lys
151             485             490                 495
154 Pro Glu Phe Val Lys Leu Phe Leu Glu Asn Gly Val Gln Leu Lys Glu
155             500             505                 510
158 Phe Val Thr Trp Asp Thr Leu Leu Tyr Leu Tyr Glu Asn Leu Asp Pro
159             515             520                 525
162 Ser Cys Leu Phe His Ser Lys Leu Gln Lys Val Leu Val Glu Asp Pro
163     530             535             540
166 Glu Arg Pro Ala Cys Ala Pro Ala Ala Pro Arg Leu Gln Met His His
167 545             550             555                 560
170 Val Ala Gln Val Leu Arg Glu Leu Leu Gly Asp Phe Thr Gln Pro Leu
171             565             570                 575
174 Tyr Pro Arg Pro Arg His Asn Asp Arg Leu Arg Leu Leu Leu Pro Val
175     580             585             590
178 Pro His Val Lys Leu Asn Val Gln Gly Val Ser Leu Arg Ser Leu Tyr
```

RAW SEQUENCE LISTING   DATE: 07/02/2002
PATENT APPLICATION: US/10/007,706   TIME: 13:57:13

Input Set : A:\A70040-1.ST25.txt
Output Set: N:\CRF3\07022002\J007706.raw

```
179           595                    600                    605
182 Lys Arg Ser Ser Gly His Val Thr Phe Thr Met Asp Pro Ile Arg Asp
183     610                    615              620
186 Leu Leu Ile Trp Ala Ile Val Gln Asn Arg Arg Glu Leu Ala Gly Ile
187 625                    630              635                    640
190 Ile Trp Ala Gln Ser Gln Asp Cys Ile Ala Ala Ala Leu Ala Cys Ser
191                    645              650                    655
194 Lys Ile Leu Lys Glu Leu Ser Lys Glu Glu Glu Asp Thr Asp Ser Ser
195                    660              665                    670
198 Glu Glu Met Leu Ala Leu Ala Glu Glu Tyr Glu His Arg Ala Ile Gly
199         675                    680              685
202 Val Phe Thr Glu Cys Tyr Arg Lys Asp Glu Glu Arg Ala Gln Lys Leu
203     690                    695              700
206 Leu Thr Arg Val Ser Glu Ala Trp Gly Lys Thr Thr Cys Leu Gln Leu
207 705                    710              715                    720
210 Ala Leu Glu Ala Lys Asp Met Lys Phe Val Ser His Gly Gly Ile Gln
211                    725              730                    735
214 Ala Phe Leu Thr Lys Val Trp Trp Gly Gln Leu Ser Val Asp Asn Gly
215                    740              745                    750
218 Leu Trp Arg Val Thr Leu Cys Met Leu Ala Phe Pro Leu Leu Leu Thr
219         755                    760              765
222 Gly Leu Ile Ser Phe Arg Glu Lys Arg Leu Gln Asp Val Gly Thr Pro
223     770                    775              780
226 Ala Ala Arg Ala Arg Ala Phe Phe Thr Ala Pro Val Val Val Phe His
227 785                    790              795                    800
230 Leu Asn Ile Leu Ser Tyr Phe Ala Phe Leu Cys Leu Phe Ala Tyr Val
231                    805              810                    815
234 Leu Met Val Asp Phe Gln Pro Val Pro Ser Trp Cys Glu Cys Ala Ile
235         820                    825              830
238 Tyr Leu Trp Leu Phe Ser Leu Val Cys Glu Glu Met Arg Gln Leu Phe
239         835                    840              845
242 Tyr Asp Pro Asp Glu Cys Gly Leu Met Lys Lys Ala Ala Leu Tyr Phe
243     850                    855              860
246 Ser Asp Phe Trp Asn Lys Leu Asp Val Gly Ala Ile Leu Leu Phe Val
247 865                    870              875                    880
250 Ala Gly Leu Thr Cys Arg Leu Ile Pro Ala Thr Leu Tyr Pro Gly Arg
251                    885              890                    895
254 Val Ile Leu Ser Leu Asp Phe Ile Leu Phe Cys Leu Arg Leu Met His
255         900                    905              910
258 Ile Phe Thr Ile Ser Lys Thr Leu Gly Pro Lys Ile Ile Ile Val Lys
259     915                    920              925
262 Arg Met Met Lys Asp Val Phe Phe Phe Leu Phe Leu Leu Ala Val Trp
263     930                    935              940
266 Val Val Ser Phe Gly Val Ala Lys Gln Ala Ile Leu Ile His Asn Glu
267 945                    950              955                    960
270 Arg Arg Val Asp Trp Leu Phe Arg Gly Ala Val Tyr His Ser Tyr Leu
271                    965              970                    975
274 Thr Ile Phe Gly Gln Ile Pro Gly Tyr Ile Asp Gly Val Asn Phe Asn
275                    980              985              990
```

```
278 Pro Glu His Cys Ser Pro Asn Gly  Thr Asp Pro Tyr Lys  Pro Lys Cys
279         995                 1000                1005
282 Pro Glu Ser Asp Ala Thr Gln  Gln Arg Pro Ala Phe  Pro Glu Trp
283     1010                1015                1020
286 Leu Thr Val Leu Leu Leu Cys  Leu Tyr Leu Leu Phe  Thr Asn Ile
287     1025                1030                1035
290 Leu Leu Leu Asn Leu Leu Ile  Ala Met Phe Asn Tyr  Thr Phe Gln
291     1040                1045                1050
294 Gln Val Gln Glu His Thr Asp  Gln Ile Trp Lys Phe  Gln Arg His
295     1055                1060                1065
298 Asp Leu Ile Glu Glu Tyr His  Gly Arg Pro Ala Ala  Pro Pro Pro
299     1070                1075                1080
302 Phe Ile Leu Leu Ser His Leu  Gln Leu Phe Ile Lys  Arg Val Val
303     1085                1090                1095
306 Leu Lys Thr Pro Ala Lys Arg  His Lys Gln Leu Lys  Asn Lys Leu
307     1100                1105                1110
310 Glu Lys Asn Glu Glu Ala Ala  Leu Leu Ser Trp Glu  Ile Tyr Leu
311     1115                1120                1125
314 Lys Glu Asn Tyr Leu Gln Asn  Arg Gln Phe Gln Gln  Lys Gln Arg
315     1130                1135                1140
318 Pro Glu Gln Lys Ile Glu Asp  Ile Ser Asn Lys Val  Asp Ala Met
319     1145                1150                1155
322 Val Asp Leu Leu Asp Leu Asp  Pro Leu Lys Arg Ser  Gly Ser Met
323     1160                1165                1170
326 Glu Gln Arg Leu Ala Ser Leu  Glu Glu Gln Val Ala  Gln Thr Ala
327     1175                1180                1185
330 Arg Ala Leu His Trp Ile Val  Arg Thr Leu Arg Ala  Ser Gly Phe
331     1190                1195                1200
334 Ser Ser Glu Ala Asp Val Pro  Thr Leu Ala Ser Gln  Lys Ala Ala
335     1205                1210                1215
338 Glu Glu Pro Asp Ala Glu Pro  Gly Gly Arg Lys Lys  Thr Glu Glu
339     1220                1225                1230
342 Pro Gly Asp Ser Tyr His Val  Asn Ala Arg His Leu  Leu Tyr Pro
343     1235                1240                1245
346 Asn Cys Pro Val Thr Arg Phe  Pro Val Pro Asn Glu  Lys Val Pro
347     1250                1255                1260
350 Trp Glu Thr Glu Phe Leu Ile  Tyr Asp Pro Pro Phe  Tyr Thr Ala
351     1265                1270                1275
354 Glu Arg Lys Asp Ala Ala Ala  Met Asp Pro Met Gly  Asp Thr Leu
355     1280                1285                1290
358 Glu Pro Leu Ser Thr Ile Gln  Tyr Asn Val Val Asp  Gly Leu Arg
359     1295                1300                1305
362 Asp Arg Arg Ser Phe His Gly  Pro Tyr Thr Val Gln  Ala Gly Leu
363     1310                1315                1320
366 Pro Leu Asn Pro Met Gly Arg  Thr Gly Leu Arg Gly  Arg Gly Ser
367     1325                1330                1335
370 Leu Ser Cys Phe Gly Pro Asn  His Thr Leu Tyr Pro  Met Val Thr
371     1340                1345                1350
374 Arg Trp Arg Arg Asn Glu Asp  Gly Ala Ile Cys Arg  Lys Ser Ile
```

RAW SEQUENCE LISTING   DATE: 07/02/2002
PATENT APPLICATION: US/10/007,706   TIME: 13:57:13

Input Set : A:\A70040-1.ST25.txt
Output Set: N:\CRF3\07022002\J007706.raw

```
375    1355                 1360               1365
378 Lys Lys Met Leu Glu Val Leu Val Val Lys Leu Pro Leu Ser Glu
379    1370                 1375               1380
382 His Trp Ala Leu Pro Gly Gly Ser Arg Glu Pro Gly Glu Met Leu
383    1385                 1390               1395
386 Pro Arg Lys Leu Lys Arg Ile Leu Arg Gln Glu His Trp Pro Ser
387    1400                 1405               1410
390 Phe Glu Asn Leu Leu Lys Cys Gly Met Glu Val Tyr Lys Gly Tyr
391    1415                 1420               1425
394 Met Asp Asp Pro Arg Asn Thr Asp Asn Ala Trp Ile Glu Thr Val
395    1430                 1435               1440
398 Ala Val Ser Val His Phe Gln Asp Gln Asn Asp Val Glu Leu Asn
399    1445                 1450               1455
402 Arg Leu Asn Ser Asn Leu His Ala Cys Asp Ser Gly Ala Ser Ile
403    1460                 1465               1470
406 Arg Trp Gln Val Val Asp Arg Arg Ile Pro Leu Tyr Ala Asn His
407    1475                 1480               1485
410 Lys Thr Leu Leu Gln Lys Ala Ala Ala Glu Phe Gly Ala His Tyr
411    1490                 1495               1500
414 <210> SEQ ID NO: 2
415 <211> LENGTH: 4512
416 <212> TYPE: DNA
417 <213> ORGANISM: Homo sapiens
419 <400> SEQUENCE: 2
420 atggagccct cagccctgag gaaagctggc tcggagcagg aggagggctt tgaggggctg    60
422 cccagaaggg tcactgacct ggggatggtc tccaatctcc ggcgcagcaa cagcagcctc   120
424 ttcaagagct ggaggctaca gtgccccttc ggcaacaatg acaagcaaga aagcctcagt   180
426 tcgtggattc ctgaaaacat caagaagaaa gaatgcgtgt attttgtgga aagttccaaa   240
428 ctgtctgatg ctgggaaggt ggtgtgtcag tgtggctaca cgcatgagca gcacttggag   300
430 gaggctacca agccccacac cttccagggc acacagtggg acccaaagaa acatgtccag   360
432 gagatgccaa ccgatgcctt ggcgacatc gtcttcacgg gcctgagcca gaaggtgaaa   420
434 aagtacgtcc gagtctccca ggacacgccc tccagcgtga tctaccacct catgacccag   480
436 cactggggc tggacgtccc caatctcttg atctcggtga ccgggggggc caagaacttc   540
438 aacatgaagc cgcggctgaa gagcattttc cgcagaggcc tggtcaaggt ggctcagacc   600
440 acaggggcct ggatcatcac aggggggtcc cacaccggcg tcatgaagca ggtaggcgag   660
442 gcggtgcggg acttcagcct gagcagcagc tacaaggaag cgagctcat caccatcgga   720
444 gtcgccacct ggggcactgt ccaccgccgc gagggcctga tccatcccac gggcagcttc   780
446 cccgccgagt acatactgga tgaggatggc caagggaacc tgacctgcct agacagcaac   840
448 cactctcact tcatcctcgt ggacgacggg acccacggcc agtacggggt ggagattcct   900
450 ctgaggacca ggctggagaa gttcatatcg gagcagacca aggaaagagg aggtgtggcc   960
452 atcaagatcc ccatcgtgtg cgtggtgctg gaggcggcc cgggcacgtt gcacaccatc  1020
454 gacaacgcca ccaccaacgg cacccctgt gtggttgtgg agggctcggg ccgcgtggcc  1080
456 gacgtcattg cccaggtggc caacctgcct gtctcggaca tcactatctc cctgatccag  1140
458 cagaaactga gcgtgttctt ccaggagatg tttgagacct tcacggaaag caggattgtc  1200
460 gagtggacca aaaagatcca agatattgtc cggaggcggc agctgctgac tgtcttccgg  1260
462 gaaggcaagg atggtcagca ggacgtggat gtggccatct tgcaggcctt gctgaaagcc  1320
464 tcacggagcc aagaccactt tggccacgag aactgggacc accagctgaa actggcagtg  1380
466 gcatggaatc gcgtggacat tgcccgcagt gagatcttca tggatgagtg gcagtggaag  1440
468 ccttcagatc tgcaccccac gatgacagct gcactcatct ccaacaagcc tgagtttgtg  1500
```

VERIFICATION SUMMARY   DATE: 07/02/2002
PATENT APPLICATION: US/10/007,706   TIME: 13:57:14

Input Set : **A:\A70040-1.ST25.txt**
Output Set: **N:\CRF3\07022002\J007706.raw**